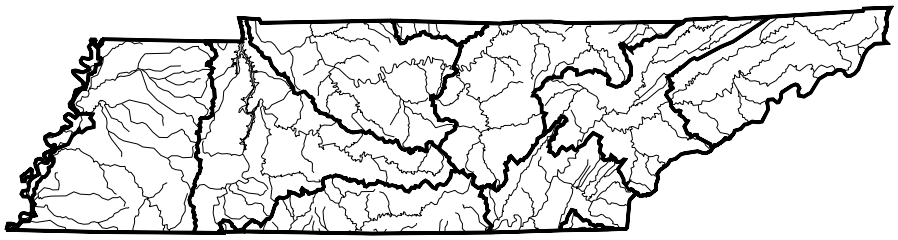
Tennessee



— Basin Boundaries
(USGS 6-Digit Hydrologic Unit)

For a copy of the Tennessee 1998 305(b) report, contact:

Greg Denton
Tennessee Department of Environment and Conservation
Division of Water Pollution Control
7th Floor, L&C Annex
401 Church Street
Nashville, TN 37243-1534
(615) 532-0699
e-mail: gdenton@mail.state.tn.us

Surface Water Quality

Of assessed rivers and streams, 73% fully support aquatic life uses, 21% partially support these uses, and 6% do not support them. Siltation, habitat alteration, nutrients, oxygen-depleting substances, and pathogens affect the most river miles. Toxic materials, pH, and flow alterations impact rivers to a lesser extent. Major sources of pollutants include agriculture, hydromodification, urban runoff, and municipal point sources. Intense impacts from mining occur in the Cumberland Plateau region, and poor quality water discharged from dams impacts streams in east and middle Tennessee.

Of assessed lakes, 90% fully support aquatic life uses, 3% partially support these uses, and 7% do not support them. The most widespread problems in lakes include nutrients, low dissolved oxygen, metals, flow alteration, and priority organics. Major sources of these pollutants are stream impoundments, contaminated sediments, urban runoff/storm sewers, land treatment, and spills.

Tennessee identified 54,811 acres of impacted wetlands (approximately 7% of existing wetlands). Major threats include siltation from construction and residential development and loss of function due to channelization and levees.

The Department of Environment and Conservation (DEC) maintains a monitoring program to identify public health threats. Swimming advisories were issued at 33 waterbodies due to elevated bacteria levels. Seven lakes and portions of eight rivers have fishing advisories due to fish tissue contamination. Sediment contamination due to legacy chemicals remains a problem in some lakes and streams.

Ground Water Quality

Ground water quality is generally good, but pollutants contaminate (or are thought to contaminate) the resource in localized areas. These pollutants include volatile and semivolatile organic chemicals, bacteria, metals, petroleum products, pesticides, and radioactive materials.

Programs to Restore Water Quality

The Division of Water Pollution Control adopted a watershed

approach to improving water quality and encouraging coordination with the public and other agencies. Each of the 54 watersheds is managed on a 5-year cycle coinciding with the duration of discharge permits. Tennessee is also conducting several total maximum daily load studies to allocate pollutant loading among all the point and nonpoint sources discharging into a stream or its tributaries.

The Division is actively identifying strategies to reduce pollutant loadings at streams not currently meeting water quality standards. DEC, in partnership agreement with other agencies, has established a goal to implement 100 control strategies on TMDL-listed streams by 2003. The DEC has also developed a wetland strategy to protect and restore Tennessee's wetlands.

Programs to Assess Water Quality

Tennessee's ambient monitoring network consists of 156 active stations sampled quarterly for conventional pollutants, nutrients, and selected metals. The state also performs intensive surveys, often including biological monitoring at streams where they suspect that human activities are degrading stream quality. The state samples toxic chemicals in fish and sediment at sites with suspected toxicity problems.

With assistance from EPA, Tennessee is subdelineating ecoregions and characterizing water quality at carefully selected reference streams to help set clean water goals on a regional, rather than statewide, basis.

Individual Use Support in Tennessee

Designated Use[a]		Percent: Good (Fully Supporting)	Good (Threatened)	Fair (Partially Supporting)	Poor (Not Supporting)	Not Attainable
Rivers and Streams (Total Miles = 61,075)[b]						
	Total Miles Assessed	73	-	21	6	-
	53,507					
		100				
	53,507		-	-	<1	-
		97				
	53,618		-	1	2	-
Lakes (Total Acres = 538,060)						
	Total Acres Assessed	90				
	538,585		-	3	7	-
		84				
	537,261		-	2	14	-
		97				
	537,261		-	1	2	-

Summary of Use Support in Tennessee

	Percent: Good (Fully Supporting)	Good (Threatened)	Impaired (For One or More Uses)
Wetlands (Total Acres = 787,000)			
Total Acres Assessed	93		
787,000		-	7

– Not reported in a quantifiable format or unknown.
[a] A subset of Tennessee's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.
[b] Includes nonperennial streams that dry up and do not flow all year.

Note: Figures may not add to 100% due to rounding.